



## Features

- Maximum height of 1.25 mm
- Current up to 2.6 A
- RoHS compliant\*

## Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# SRU6011 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU6011-1R4Y	1.4	±30	8	7.96	140	40	2.60	1.80	707
SRU6011-2R7Y	2.7	±30	8	7.96	100	62	2.20	1.45	490
SRU6011-4R7Y	4.7	±30	8	7.96	70	86	1.80	1.10	374
SRU6011-6R8Y	6.8	±30	7	7.96	55	136	1.40	0.90	303
SRU6011-100Y	10	±30	12	2.52	45	220	1.10	0.72	236
SRU6011-150Y	15	±30	10	2.52	32	320	0.95	0.62	193
SRU6011-220Y	22	±30	10	2.52	26	390	0.80	0.48	163
SRU6011-330Y	33	±30	10	2.52	22	560	0.68	0.38	141
SRU6011-470Y	47	±30	10	2.52	20	850	0.55	0.32	112
SRU6011-680Y	68	±30	12	2.52	18	1200	0.46	0.28	92

\*\*K-Factor: To calculate core flux density,  $B_{p-p}$  (gauss) =  $K \times L(\mu H) \times \Delta I$  (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

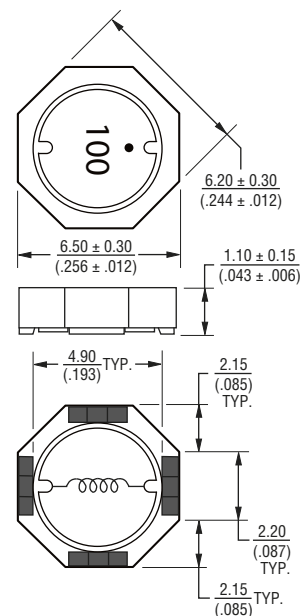
## General Specifications

Test Voltage ..... 0.1 V  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temp. .... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temp. .... -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

## Materials

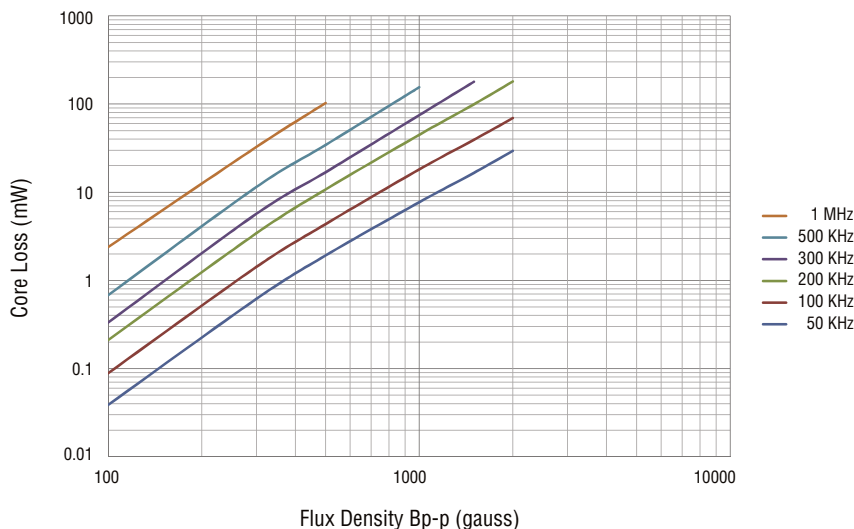
Core ..... Ferrite DR and RI core  
 Wire ..... Enamelled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current.. Ind. drop 35 % typ. at Isat  
 Temp. Rise..... 40 °C max. at rated Irms  
 Packaging..... 1000 pcs. per reel

## Product Dimensions

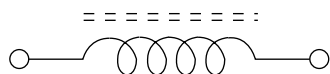


DIMENSIONS:  $\frac{MM}{(INCHES)}$

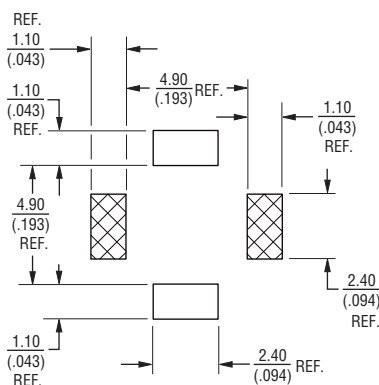
## Core Loss vs. Flux Density



## Electrical Schematic



## Recommended Layout



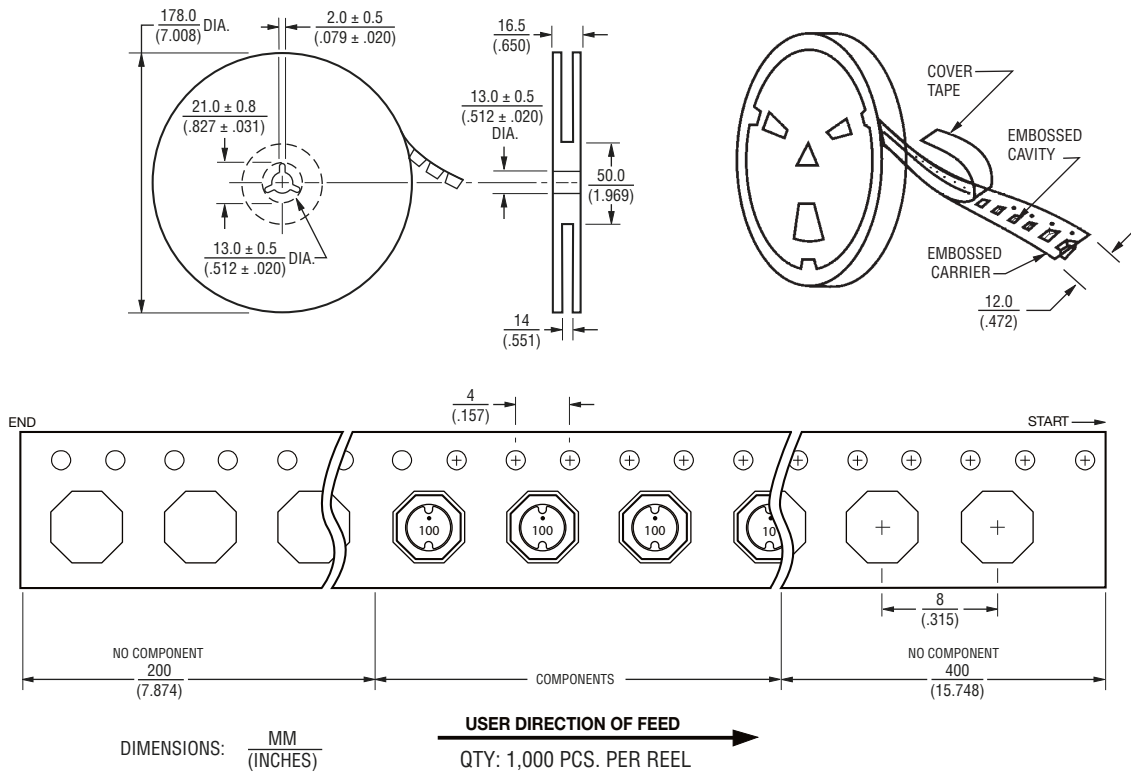
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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# SRU6011 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 03/18

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